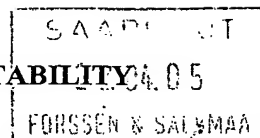


## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference P6803PC00		FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/FI 2003/000970	International filing date (day/month/year) 18-12-2003	Priority date (day/month/year) 20-12-2002	
International Patent Classification (IPC) or national classification and IPC H04Q7/38			
Applicant Nokia Corporation et al			

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
  - ☒ (sent to the applicant and to the International Bureau) a total of 4 sheets, as follows:
    - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:
 

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand 02-07-2004	Date of completion of this report 11-04-2005
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer  Catharina Karlsson /LR Telephone No. +46 8 782 25 00

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI 2003/000970

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))  
☐ publication of the international application (under Rule 12.4)  
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ the international application as originally filed/furnished

☒ the description:

pages 1 - 12 as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☒ the claims:

pages \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19

pages\* 13 - 16 received by this Authority on 14.01.2005

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☒ the drawings:

pages 1 - 5 as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	<u>1-16</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-16</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-16</u>	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

The claimed invention

The present invention aims to solve the problem of delays during a cell access mechanism.

Reference is made to the following documents:

D1: WO0186889 A1

D2: WO0217668 A1

D3: US2002025812 A1

D1 discloses a method and a system for a fast access to an uplink channel. A mobile station does not need authorisation to use an uplink radio channel.

D2 describes a method for providing fast access in a mobile communications network. The network transmits information indicating whether fast access is supported or not.

D3 is considered to merely disclose the state of the art and is not commented on further.

The invention according to claims 1-16 differs from D1 and D2 in that a cell communications device is enabled to directly start sending data on a traffic channel.

The subject-matter of claims 1-16 is therefore novel (Article 33 (2) PCT).

The present invention discloses an alternative solution to fast access as defined in D1 or D2. This solution is not

.../...

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

obvious to a person skilled in the art. Consequently, the invention according to claims 1-16 involves an inventive step (Article 33(3) PCT).

The invention according to claims 1-16 is industrially applicable (Article 33(1) PCT).

## CLAIMS:

1. A method between a communications device and a communications network,  
which communications network generally provides at least a direct cell access  
5 mechanism and an alternative cell access mechanism for the communications  
device for uplink access to the communications network, the method comprising:  
determining by the communications network and indicating to the communications device whether the direct cell access mechanism can at a given  
10 time be provided.
2. A method according to claim 1, wherein in a situation in which the direct cell  
access can not be provided the method comprises:  
indicating to the communications device that the alternative cell access  
15 mechanism should be used.
3. A method according to claim 2, wherein the alternative cell access mechanism  
comprises using a separate access channel for uplink access.
- 20 4. A method according to any preceding claim, wherein said indicating whether  
the direct cell access mechanism can be provided comprises indicating  
whether the communications device can directly start sending user data on a  
traffic channel.
- 25 5. A method according to claim 4, wherein a radio interface between the mobile  
communications device (110) and the base station (120) is layered into protocol  
layers which form a protocol stack, and the traffic channel forms part of a  
logical traffic channel operating on a data link layer (Layer 2) of the protocol  
stack.
- 30 6. A method according to claim 5, wherein said indicating whether the commu-

nications device can directly start sending on a traffic channel is carried out on a network layer (Layer 3) of the protocol stack.

- 5 7. A method according to claim 1, wherein said indicating whether the direct cell access mechanism can be provided is performed by sending a broadcast message to a set of communications devices including the communications device of claim 1.
- 10 8. A method according to claim 7, wherein said broadcast message contains a parameter value further restricting the set of communications devices.
- 15 9. A method according to claim 1, wherein said indicating whether the direct cell access mechanism can be provided is performed by sending a multicast message to a limited set of communications devices including the communications device of claim 1.
- 20 10. A method according to claim 1, wherein said indicating whether the direct cell access mechanism can be provided is performed by sending a point-to-point message to the communications device.
11. A method according to any of the claims 7 to 10, wherein said message conveys to the communications device a parameter value indicating whether the direct cell access mechanism is enabled.
- 25 12. A method according to any preceding claim, wherein the communications network comprises a base station serving a cell of a mobile communications system, and wherein the method comprises:
  - performing traffic and/or radio measurements by the base station; and
  - determining by the base station whether the direct cell access mechanism
- 30 can at a given time be provided on the basis of said measurements.

13. A communications device (110) configured for operation with a communications network, which communications network generally provides at least a direct cell access mechanism and an alternative cell access mechanism for the communications device (110) for uplink access to the communications network, the communications device (110) comprising:

means (RF, MCU, 515, SW) for receiving an indication sent by the communications network, the indication indicating to the communications device (110) whether the direct cell access mechanism can at a given time be provided.

14. A communications device (110) according to claim 13, wherein the communications device is a mobile hand-held device of a cellular communications network.

15. A base station (120) of a communications network, which communications network generally provides at least a direct cell access mechanism and an alternative cell access mechanism for a communications device (110) for uplink access to the communications network, the base station (120) comprising:

means (420, 425, 440) for determining and indicating to the communications device (110) whether the direct cell access mechanism can at a given time be provided.

16. A system comprising a communications device (110) and a communications network, which communications network generally provides at least a direct cell access mechanism and an alternative cell access mechanism for the communications device (110) for uplink access to the communications network, the communications network comprising:

means (420, 425, 440) for determining and indicating to the communications device (110) whether the direct cell access mechanism can at a given time be provided; and the communications device (110) comprising:

means (RF, MCU, 515, SW) for receiving said indication.